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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,165	05/31/2006	Hee-Woo Rhee	930086-2027	1364
<div>7590 Ronald R. Santucci Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151</div>				
<div>07/31/2009</div>				
<div>EXAMINER</div>				
<div>OU'RONGBE, OLATUNDE S</div>				
<div>ART UNIT</div>		<div>PAPER NUMBER</div>		
<div>1796</div>				
<div>MAIL DATE</div>		<div>DELIVERY MODE</div>		
<div>07/31/2009</div>		<div>PAPER</div>		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,165

Applicant(s)

RHEE ET AL.

Examiner

OLATUNDE S. OJURONGBE

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 20090417

DETAILED ACTION

1. The amendment filed on 04/17/2009 has been entered. Claims 1 and 4-13 are pending in the application.
2. The 103 rejection based on Yim et al (US 2003/0055134) is withdrawn.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ko et al (US 2001/0055891)** in view of **Yim et al (US 2003/0055134)**.

The rejection of claims 1 and 4-12 remains as set forth in prior office action. Concerning the amendments to claim 1, the examiner notes that the product of the reaction of the methyltrimethoxysilane and the bis-trimethoxysilylethane of modified Ko et al, as found in example 3 [0049], reads on the copolymer of methyltrimethoxysilane and bistrimethoxysilylethane of the instant claim.

Regarding **claim 13**, modified Ko et al teaches all the claim limitations as set forth above and further teaches examples of the solvent of the invention to include N,N-dimethyl formamide [0037-0038].

Response to Arguments

4. Applicants' arguments filed on 04/17/2009 have been fully considered but they are not persuasive.

The applicants argue that when Ko is referencing the mixing of methyltrimethoxysilane and bis-trimethoxysilane in THF solvent, Ko is forming a composition wherein the chemical and physical characteristics of methyltrimethoxysilane and bis-trimethoxysilane remain intact, and that Ko is not subjecting the composition to further processing to form a copolymer as in the applicants' claimed invention. The examiner disagrees.

Firstly, as stated in the rejection above, the product of the reaction of the methyltrimethoxysilane and the bistrimethoxysilylethane of modified Ko as found in example 3 of Ko reads on the copolymer of the instant claim. Concerning the applicants' argument that Ko is not subjecting the composition to processing to form a copolymer as in the applicants' claimed invention, the examiner notes that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Moreover, the method/process by which the copolymer of methyltrimethoxysilane and bistrimethoxysilylethane of the instant claim 1 is formed is a product-by-process limitation, and the examiner notes that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or

obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

The applicants further state that the dielectric constant of the applicant's dielectric film was decreased to 1.52, whereas the examiner acknowledged that the dielectric constant of Ko's invention was 3.3. The examiner disagrees.

The examiner notes that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references; the rejection of the claims is based on the combination of Ko et al (US 2001/0055891) and Yim et al (US 2003/0055134). Moreover, the disclosure of Ko et al is not limited to exemplified embodiments, rather, it encompasses all embodiments, including non-exemplified embodiments. The instant claims are unpatentable over modified Ko et al. The applicants' arguments have failed to put the application in condition for allowance.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLATUNDE S. OJURONGBE whose telephone number is (571)270-3876. The examiner can normally be reached on Monday-Thursday, 7.15am-4.45pm, EST time, Alt Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571)272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

O.S.O.

/Randy Gulakowski/

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Supervisory Patent Examiner, Art Unit 1796